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Claims:

The following listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A pharmaceutical formulation for pulmonary administration as a powder, the pharmaceutical formulation comprising:

particulates comprising consisting essentially of an active agent particle particles in a phospholipid lipid matrix, the active agent having a solubility in water of less than 1.0 mg/ml; wherein the active agent particles are dispersed throughout the phospholipid matrix; and

wherein at least 90% of the active agent particles in the pharmaceutical formulation have a geometric diameter less than 3  $\mu\text{m}$  and wherein the particulates have a mass median diameter less than 10-20  $\mu\text{m}$  and a bulk density of less than about 0.5 g/cm<sup>3</sup>.
2. (Currently Amended) A pharmaceutical formulation according to claim 1 wherein the particulates have a mass median aerodynamic diameter less than 10  $\mu\text{m}$  about 2.6  $\mu\text{m}$ .
3. (Currently Amended) A pharmaceutical formulation according to claim 1 wherein the particulates have a mass median diameter less than 5  $\mu\text{m}$  a formulation emitted dose is at least about 93 percent.
4. (Currently Amended) A pharmaceutical formulation according to claim 1 wherein at least 95% of the active agent particles have a geometric diameter less than 3  $\mu\text{m}$  a formulation fine particle fraction of less than 3.3  $\mu\text{m}$  is at least about 72 percent.

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5. (Currently Amended) A pharmaceutical formulation according to claim 1 wherein ~~at least 50% of the active agent particles have a geometric diameter between 0.5  $\mu$ m and 3  $\mu$ m~~ the formulation exhibits an Ostwald ripening as depicted in Fig 1.
6. (Currently Amended) A pharmaceutical formulation according to claim 1 wherein ~~at least 50% of the active agent particles have a geometric diameter between 1  $\mu$ m and 3  $\mu$ m~~ the formulation provides for the delivery to the lung of a dose of at least about 5 mg in a single inhalation.
7. (Original) A pharmaceutical formulation according to claim 1 wherein the lipid matrix comprises one or more phospholipids.
8. (Currently Amended) A pharmaceutical formulation according to claim 1 wherein the lipid matrix comprises one or more of dipalmitoylphosphatidylcholine, ~~distearylphosphatidylcholine~~ distearoylphosphatidylcholine, diarachidoylphosphatidylcholine dibehenoylphosphatidylcholine, diphosphatidyl glycerol, short-chain phosphatidylcholines, long-chain saturated phosphatidylethanolamines, long-chain saturated phosphatidylserines, long-chain saturated phosphatidylglycerols, and long-chain saturated phosphatidylinositols.
9. (Original) A pharmaceutical formulation according to claim 1 wherein the particulates are hollow.
10. (Original) A pharmaceutical formulation according to claim 1 wherein the particulates are porous.
11. (Original) A pharmaceutical formulation according to claim 1 wherein the particulates are hollow and porous.

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12. (Currently Amended) A pharmaceutical formulation according to claim 1 wherein the pharmaceutical formulation has a bulk density of less than 0.5 g/cm<sup>3</sup> the active agent comprises tobramycin.
13. (Original) A pharmaceutical formulation according to claim 1 wherein the pharmaceutical formulation has a bulk density of less than 0.3 g/cm<sup>3</sup>.
14. (Original) A pharmaceutical formulation according to claim 1 wherein the pharmaceutical formulation has a bulk density of less than 0.2 g/cm<sup>3</sup>.
15. (Original) A pharmaceutical formulation according to claim 1 wherein the particulates are in dry powder form for aerosolization in a dry powder inhaler.
16. (Original) A pharmaceutical formulation according to claim 1 wherein the particulates are suspended in a propellant for aerosolization in a metered dose inhaler.
17. (Original) A pharmaceutical formulation according to claim 1 wherein the particulates are suspended within a liquid for aerosolization in a nebulizer.
18. (Original) A pharmaceutical formulation according to claim 1 wherein the active agent particle is crystalline.
19. (Original) A pharmaceutical formulation according to claim 1 wherein the particulate further comprises a polyvalent cation.
20. (Currently Amended) A pharmaceutical formulation according to claim 1 wherein the active agent has a solubility in water of less than [[0.1]] 1.0 mg/ml.
21. (Currently Amended). A pharmaceutical formulation according to claim 1 wherein the particulates are formed by spray drying with a blowing agent.

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22. (Original) A pharmaceutical formulation according to claim 1 wherein the insoluble active agent comprises an antimycotic agent.

23. (Withdrawn) A method of making a pharmaceutical formulation for pulmonary administration, the method comprising: suspending active agent particles and a hydrophobic material in a liquid feedstock, wherein at least 90% of the active agent particles have a geometric diameter less than 3  $\mu\text{m}$ ; and spray drying the feedstock suspension to produce particulates comprising an active agent particle at least partially in the hydrophobic material.

24. (Withdrawn) A method according to claim 23 wherein the feedstock comprises water and wherein the active agent has a solubility in water of less than 1.0 mg/ml.

25. (Withdrawn) A method according to claim 23 further comprising collecting the particulates.

26. (Withdrawn) A method according to claim 25 wherein the collected particulates have a mass median diameter less than 20  $\mu\text{m}$ .

27. (Withdrawn) A method according to claim 25 wherein the collected particulates have a mass median diameter less than 10  $\mu\text{m}$ .

28. (Withdrawn) A method according to claim 23 wherein 95% of the active agent particles have a geometric diameter less than 3  $\mu\text{m}$ .

29. (Withdrawn) A method according to claim 23 wherein the hydrophobic material comprises a lipid.

30. (Withdrawn) A method according to claim 23 wherein the hydrophobic material comprises a phospholipid.

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31. (Withdrawn) A method according to claim 23 wherein the hydrophobic material comprises a hydrophobic amino acid.
32. (Withdrawn) A method according to claim 23 further comprising adding an emulsifying agent to the feedstock.
33. (Withdrawn) A method according to claim 23 wherein the emulsifying agent comprises distearoyl phosphatidylcholine.
34. (Withdrawn) A method according to claim 23 further comprising adding a blowing agent to the feedstock.
35. (Withdrawn) A method according to claim 23 further comprising adding a polyvalent cation to the feedstock.
36. (Withdrawn) A method according to claim 23 wherein the feedstock is spray dried in a manner to produce particulates having a bulk density of less than 0.5 g/cm<sup>3</sup>.
37. (Withdrawn) A pharmaceutical formulation prepared by a method according to claim 23.
38. (Currently Amended) A pharmaceutical formulation for pulmonary administration, the pharmaceutical formulation comprising:  
particulates comprising an consisting essentially of active agent amphotericin B particle particles in a lipid matrix comprising a phospholipid, the active agent having a solubility in water of less than 1.0 mg/ml and wherein the active agent particles are dispersed throughout the phospholipid matrix; and  
wherein at least 90% of the amphotericin B active agent particles in the pharmaceutical formulation have a geometric diameter less than 3  $\mu\text{m}$  and wherein the particulates are hollow and/or porous, and have a mass median diameter less than 20  $\mu\text{m}$ , a bulk density of less than about 0.5 g/cm<sup>3</sup> and a mass median aerodynamic

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diameter less than about 2.6  $\mu$ m.

39. (Currently Amended) A pharmaceutical formulation according to claim 38 wherein the particulates have a mass median diameter less than 10  $\mu$ m the formulation provides for the delivery to the lung of a dose of at least about 5 mg in a single inhalation.

40. (Original) A pharmaceutical formulation according to claim 38 wherein the particulates have a mass median diameter less than 5  $\mu$ m.

41. (Currently Amended) A pharmaceutical formulation according to claim 38 wherein ~~at least some of the particulates comprise a plurality of amphotericin B particles in a lipid matrix a formulation fine particle fraction of less than 3.3  $\mu$ m is at least about 72 percent.~~

42. (Currently Amended) A pharmaceutical formulation according to claim 38 wherein ~~the amphotericin B particles are crystalline the formulation provides for the delivery to the lung of a dose of at least about 5 mg in a single inhalation.~~

43. (Cancelled).

44. (Currently Amended) A pharmaceutical formulation according to claim 38 wherein the ~~lipid~~ matrix comprises one or more of dipalmitoylphosphatidylcholine, distearoylphosphatidylcholine, distearoylphosphatidylcholine, diarachidoylphosphatidylcholine, dibehenoylphosphatidylcholine, diprophatidyl glycerol, short-chain phosphatidylcholines, long-chain saturated phosphatidylethanolamines, long-chain saturated phosphatidylserines, long-chain saturated phosphatidylglycerols, and long-chain saturated phosphatidylinositols.

45-46 (Cancelled)

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47. (Original) A pharmaceutical formulation according to claim 38 wherein the particulates have a bulk density less than 0.3 g/cm<sup>3</sup>.

48. (Original) A pharmaceutical formulation according to claim 38 wherein the particulates have a bulk density less than 0.2 g/cm<sup>3</sup>.

49. (Original) A pharmaceutical formulation according to claim 38 wherein the particulates are in dry powder form for aerosolization in a dry powder inhaler.

50. (Original) A pharmaceutical formulation according to claim 38 wherein the particulates are suspended in a propellant for aerosolization in a metered dose inhaler.

51. (Original) A pharmaceutical formulation according to claim 38 wherein the particulates are suspended within a liquid for aerosolization in a nebulizer.

52. (Original) A pharmaceutical formulation according to claim 38 wherein the particulates further comprise a polyvalent cation.

53. (Currently Amended) A pharmaceutical formulation according to claim 38 wherein the particulates are formed by spray drying with a blowing agent.

54. (Currently Amended) A pharmaceutical formulation for pulmonary administration, the pharmaceutical formulation comprising:  
particulates comprising an amphotericin B particle in a lipid matrix comprising a phospholipid wherein the amphotericin B particles have a solubility in water of less than 1.0 mg/ml, and are dispersed throughout the phospholipid matrix, and;  
wherein the particulates are hollow and/or porous and wherein the particulates have a mass median diameter less than 20  $\mu$ m, a bulk density of less than about 0.5 g/cm<sup>3</sup> and a mass median aerodynamic diameter less than about 2.6  $\mu$ m.

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55. (Original) A pharmaceutical formulation according to claim 54 wherein the particulates have a mass median diameter less than 10  $\mu\text{m}$ .

56. (Original) A pharmaceutical formulation according to claim 54 wherein the particulates have a mass median diameter less than 5  $\mu\text{m}$ .

57. (Cancelled)

58. (Original) A pharmaceutical formulation according to claim 54 wherein the amphotericin B particles are crystalline.

59. (Cancelled)

60. (Currently Amended) A pharmaceutical formulation according to claim 54 wherein the lipid matrix comprises one or more of dipalmitoylphosphatidylcholine, distearylphosphatidylcholine distearoylphosphatidylcholine, diarachidoylphosphatidylcholine dibehenoylphosphatidylcholine, diphasphatidyl glycerol, short-chain phosphatidylcholines, long-chain saturated phosphatidylethanolamines, long-chain saturated phosphatidylserines, long-chain saturated phosphatidylglycerols, and long-chain saturated phosphatidylinositols.

61. (Cancelled)

62. (Original) A pharmaceutical formulation according to claim 54 wherein the particulates have a bulk density less than 0.3 g/cm<sup>3</sup>.

63. (Original) A pharmaceutical formulation according to claim 54 wherein the particulates have a bulk density less than 0.2 g/cm<sup>3</sup>.

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64. (Original) A pharmaceutical formulation according to claim 54 wherein the particulates are in dry powder form for aerosolization in a dry powder inhaler.

65. (Original) A pharmaceutical formulation according to claim 54 wherein the particulates are suspended in a propellant for aerosolization in a metered dose inhaler.

66. (Original) A pharmaceutical formulation according to claim 54 wherein the particulates are suspended within a liquid for aerosolization in a nebulizer.

67. (Original) A pharmaceutical formulation according to claim 54 wherein the particulates further comprise a polyvalent cation.

68. (Currently Amended) A pharmaceutical formulation according to claim 54 wherein the particulates are formed by spray drying with a blowing agent.

69- 83 (Cancelled).

84. (Withdrawn) A method of making a pharmaceutical formulation for pulmonary administration, the method comprising: suspending amphotericin B particles and a hydrophobic material in a liquid feedstock, wherein at least 90% of the active agent particles have a geometric diameter less than 3  $\mu\text{m}$ ; and spray drying the feedstock suspension to produce particulates comprising amphotericin B at least partially in the hydrophobic material.

85. (Withdrawn) A method according to claim 84 further comprising collecting the particulates, wherein the collected particulates have a mass median diameter less than 20  $\mu\text{m}$ .

86. (Withdrawn) A method according to claim 84 further comprising collecting the particulates, wherein the collected particulates have a mass median diameter less than 10  $\mu\text{m}$ .

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87. (Withdrawn) A method according to claim 84 wherein the hydrophobic material comprises a lipid.

88. (Withdrawn) A method according to claim 84 wherein the hydrophobic material comprises a phospholipid.

89. (Withdrawn) A method according to claim 84 wherein the hydrophobic material comprises a hydrophobic amino acid.

90. (Withdrawn) A method according to claim 84 further comprising adding an emulsifying agent to the feedstock.

91. (Withdrawn) A method according to claim 84 further comprising adding a blowing agent to the feedstock.

92. (Withdrawn) A method according to claim 84 further comprising adding a polyvalent cation to the feedstock.

93. (Withdrawn) A method according to claim 84 wherein the feedstock is spray dried in a manner to produce particulates having a bulk density of less than 0.5 g/cm<sup>3</sup>.

94. (Withdrawn) A pharmaceutical formulation prepared by a method according to claim 84.

95. (Withdrawn) A method of making a pharmaceutical formulation for pulmonary administration, the method comprising: suspending amphotericin B particles in a liquid feedstock, the liquid feedstock having a lipid and a blowing agent dissolved or suspended therein; and spray drying the feedstock suspension to produce hollow and/or porous particulates comprising amphotericin B and the lipid.

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96. (Withdrawn) A method according to claim 95 further comprising collecting the particulates, wherein the collected particulates have a mass median diameter less than 20  $\mu\text{m}$ .

97. (Withdrawn) A method according to claim 95 further comprising collecting the particulates, wherein the collected particulates have a mass median diameter less than 10  $\mu\text{m}$ .

98. (Withdrawn) A method according to claim 95 wherein the lipid comprises a phospholipid.

99. (Withdrawn) A method according to claim 95 further comprising adding an emulsifying agent to the feedstock.

100. (Withdrawn) A method according to claim 95 further comprising adding a polyvalent cation to the feedstock.

101. (Withdrawn) A method according to claim 95 wherein the feedstock is spray dried in a manner to produce particulates having a bulk density of less than 0.5 g/cm<sup>3</sup>.

102. (Withdrawn) A pharmaceutical formulation prepared by a method according to claim 95.

103. (New) A pharmaceutical formulation according to claim 1 wherein the active agent comprises ciprofloxacin.